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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,576	10/09/2007	John G. Hildebrand	CCPC 0122 PUSA4	3052

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EXAMINER	
EKPO, NNENNA NGOZI	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,576	HILDEBRAND ET AL.	
	Examiner	Art Unit	
	NNENNA N. EKPO	2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-11 and 21-32* is/are pending in the application.

4a) Of the above claim(s) *5,6 and 12-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-11 and 21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 7-11, 21-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. Previous 35 USC § 101 rejection to claims 25-32 are withdrawn in view of Applicant's amendment filed on 03/08/2010.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-3, 7, 11, 22, 23, 25-27 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Patent No. 6,813,643) in view of Futamata (U.S. Patent No. 7,339,954).

Regarding **claims 1 and 25**, Perlman discloses an apparatus comprising:

a tuner (120, 222) configured to tune to a radio frequency (RF) carrier frequency associated with an AV only transport associated with AV signals and an integrated transport associated with AV and data packets (see figs. 2a-2c);

a demodulator (130, 236) configured to demodulate the tuned transports for output (see figs. 2a-2c);

the switch configured to simultaneously separate packets associated with the AV only transport from packets associated with the integrated transport (col. 2, lines 50-col. 3, line 6, a switch selects a signal from two signals inputted into the switch, therefore if two signals are being simultaneously received then clearly the switch simultaneously selects one of the signals, thereby simultaneously switching between two signals);

a data processor in communication with the switch and configured to separate AV related packets from data related packets included within the integrated transport (see col. 4, lines 51-59).

However, Perlman is silent as to a demodulator configured to demodulate the tuned transports for output to a switch, a demultiplexer in communication with the switch and the data processor configured to process AV payloads both from the separate AV packets of the integrated transport and from the AV signals of the AV only transport, wherein the AV signals of the AV only transport are received directly from the switch and wherein the AV packets associated with the integrated transport are received through a signaling pathway in which the switch outputs the integrated transport associated with the AV packets directly to the data processor and the data processor outputs the AV packets directly to the demultiplexer; and a decoder in communication with the demultiplexer and configured to decode the AV payloads for output to a video port and an audio port.

Futamata discloses a demodulator (fig. 2 (2)) configured to demodulate the tuned transports (fig. 2 (1)) for output to a switch (fig. 2 (4)) (see col. 7, lines 63-col. 8, line 23),

a demultiplexer (fig. 2 (6)) in communication with the switch (fig. 2 (4)) and the data processor (fig. 2 (12)) configured to process AV payloads both from the separate AV packets of the integrated transport and from the AV signals of the AV only transport, wherein the AV signals of the AV only transport are received directly from the switch (fig. 2 (4)) and wherein the AV packets associated with the integrated transport are received through a signaling pathway in which the switch (fig. 2 (4)) outputs the integrated transport associated with the AV packets directly to the data processor (fig. 2 (12)) and the data processor (fig. 2 (12)) outputs the AV packets directly to the demultiplexer (fig. 2 (6)) (see fig. 2 and col. 7, lines 63-col. 9, line 16); and

a decoder (fig. 2 (9)) in communication with the demultiplexer (fig. 2 (6)) and configured to decode the AV payloads for output to a video port and an audio port (fig. 2 (8)) (see fig. 2 and col. 7, lines 63-col. 9, line 16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Perlman include a demultiplexer in communication with the switch and the data processor configured to process AV payloads both from the separate AV packets of the integrated transport and from the AV signals of the AV only transport, wherein the AV signals of the AV only transport are received directly from the switch and wherein the AV packets associated with the integrated transport are received through a signaling pathway in which the switch outputs the integrated transport associated with the AV packets directly to the data processor and the data processor outputs the AV packets directly to the

demultiplexer as taught by Futamata for the advantage of receiving different audio-visual signals.

Regarding **claims 2 and 26**, Perlman and Futamata discloses everything claimed as applied above (*see claims 1 and 25*). Perlman discloses wherein the AV only transport is associated with a baseline architecture (see col. 4, lines 61-col. 5, line 6, the content providers transmit multimedia content i.e. audio/video content, MPEG2 from the head end to the end user).

Regarding **claims 3 and 27**, Perlman and Futamata discloses everything claimed as applied above (*see claims 1 and 25*). Perlman discloses wherein the integrated transport is associated with an extended mode 1 architecture (see col. 3, lines 41-62, MPEG2 and DOCSIS share the QAM demodulation logic, which implies that the share the same/single stream and that MPEG and DOCSIS stream are combined).

Regarding **claims 7 and 29**, Perlman and Futamata discloses everything claimed as applied above (*see claims 1 and 25*). Perlman discloses the SVD wherein the decoder is configured for decoding payloads compressed according to MPEG-2 protocols (see col. 1, lines 39-46, col. 2, lines 50-57).

Regarding **claim 11**, Perlman and Futamata discloses everything claimed as applied above (*see claim 1*). Perlman discloses the SVD further comprising a cable modem in communication with the processor for processing data packets (see col. 4, lines 11-23).

Regarding **claim 22**, Perlman and Futamata discloses everything claimed as applied above (*see claim 2*). Perlman discloses wherein the baseline architecture consists of a scheme in which MPEG AV streams are carried directly over MPEG-2 transport and data packets are carried separately over a DOCSIS MPEG-2 transport such that different transport streams are associated with data and AV packets (see col. 3, lines 48-59, MPEG 2 standard carries audio and video streams together while DOCSIS standard carries audio and video separately).

Regarding **claim 23**, Perlman and Futamata discloses everything claimed as applied above (*see claim 3*). Perlman discloses wherein the extended mode 1 architecture consists of a scheme in which MPEG-2 AV transport packets are combined with DOCSIS data packets in a single DOCSIS MPEG-2 transport stream (see col. 3, lines 48-59, MPEG 2 standard carries audio and video streams together while DOCSIS standard carries audio and video separately).

4. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Futamata (U.S. Patent No. 7,339,954) in view of Perlman (U.S. Patent No. 6,813,643).

Regarding **claim 21**, Futamata discloses an apparatus comprising:

a switch (fig. 2 (4)) configured to simultaneously route a first transport to a demultiplexer (fig. 2 (6)) and a second transport to a data processor (fig. 2 (12)), the first having packets with only AV payloads and the second transport having packets with AV payloads and other packets with data payloads (see fig. 2, a switch selects a signal from two signals inputted into the switch, therefore if two signals are being simultaneously received then clearly the switch simultaneously selects one of the signals, thereby simultaneously switching between two signals);

wherein the demultiplexer (fig. 2 (6)) is configured to process AV payloads on the first transport received directly from the switch (fig. 2 (4)) and AV payloads on the second transport received through a signaling pathway in which the switch outputs the second transport directly to the data processor (fig. 2 (12)) and the data processor outputs the AV payloads on the second transport directly to the demultiplexer (see fig. 2, col. 7, lines 63-col. 9, line 16).

However, Futamata fails to specifically disclose wherein the data processor is configured to separate the AV payloads from the data payloads carried in the second transport and to output the AV payloads to the demultiplexer and the data payloads to a microprocessor such that the SVD is configured to simultaneously receive both of the first and second transport streams and to decode and process the associated AV and data payloads.

Perlman discloses wherein the data processor is configured to separate the AV payloads from the data payloads carried in the second transport and to output the AV payloads to the demultiplexer and the data payloads to a microprocessor such that the SVD is configured to simultaneously receive both of the first and second transport streams and to decode and process the associated AV and data payloads (see col. 3, lines 63-col. 4, line 10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Futamata to include data processor is configured to separate the AV payloads from the data payloads carried in the second transport and to output the AV payloads to the demultiplexer and the data payloads to a microprocessor such that the SVD is configured to simultaneously receive both of the first and second transport streams and to decode and process the associated AV and data payloads as taught by Perlman for the advantage of allowing a user to concurrently watch multiple channels on a display.

5. **Claims 4, 24 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Patent No. 6,813,643) and Futamata (U.S. Patent No. 7,339,954) as applied to *claim 1* above, and further in view of Chelehmal et al. (U.S. Publication No. 2002/0046406).

Regarding **claims 4 and 28**, Perlman and Futamata discloses everything claimed as applied above (*see claims 1 and 25*). However, Perlman and Futamata are silent on the integrated transport is associated with an extended mode 2 architecture.

Chelehmal et al. discloses the integrated transport is associated with an extended mode 2 architecture (see paragraphs 0025-0028, RTP, UDP, IP and DOCSIS are being combined).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the systems and methods of Perlman and Futamata to include the integrated transport is associated with an extended mode 2 architecture as taught by Chelehmal et al. for the advantage of playing back the audio/video contents.

Regarding **claim 24**, Perlman, Futamata and Chelehmal et al. discloses everything claimed as applied above (*see claim 4*).

Chelehmal et al. discloses wherein the extended mode 2 architecture consists of a scheme in which MPEG-2 AV transport packets in RTP payloads over UDP over IP over DOCSIS are combined with DOCSIS data packets in a single DOCSIS MPEG-2 transport stream with the ability to also use other real-time protocols instead of RTP (see paragraphs 0025-0028).

6. **Claims 8-10, and 30-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Patent No. 6,813,643), and Futamata (U.S. Patent No. 7,339,954) as applied to *claim 1* above, and further in view of Lu et al. (U.S. Publication No. 2004/0179610).

Regarding **claims 8 and 30,** Perlman and Futamata discloses everything claimed as applied above (*see claims 1 and 25*). However, Perlman and Futamata fail to specifically disclose the decoder is configured for decoding payloads compressed according to advanced video compression (AVC) protocols.

Lu et al. discloses the decoder is configured for decoding payloads compressed according to advanced video compression (AVC) protocols (see paragraphs 0036 and 0048).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the systems and methods of Perlman and Futamata to include the decoder is configured for decoding payloads compressed according to advanced video compression (AVC) protocols as taught by Lu et al. for the advantage of programs coming into the set top box already compressed into MPEG-2 format.

Regarding **claims 9 and 31**, Perlman, Futamata and Lu et al. discloses everything claimed as applied above (*see claims 8 and 30*). Lu et al. discloses the AVC protocols are associated with MPEG-4 (see paragraph 0054).

Regarding **claims 10 and 32**, Perlman, Futamata and Lu et al. discloses everything claimed as applied above (*see claims 8 and 32*). Lu et al. discloses the AVC protocols are associated with H.264 (see paragraph 0054).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NNENNA N. EKPO whose telephone number is (571)270-1663. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nnenna Ekpo/
Patent Examiner, Art Unit 2425
June 4, 2010.

/Brian T. Pendleton/

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